

Brightwell, Leola

From: Turner, Nardina
Sent: Thursday, February 11, 2016 1:30 PM
To: Saskowski, Ronald
Subject: FW: R4 LIMS Results: Project 13-0116, C130213 SVOA 02 04 13 1100
Attachments: C130213 SVOA FINAL 02 04 13 1100.PDF; C130213 SVOA FINAL 02 04 13 1100 - 13-0116 - SMOKEY MOUNTAIN SMELTERS 02-04-2013.110009331222.Dat

From: R4LIMS
Sent: Monday, February 04, 2013 10:46 PM
To: Kestle, Wendell <Kestle.Rusty@epa.gov>
Cc: Turner, Nardina <Turner.Nardina@epa.gov>; terence.chuhay@jmwaller.com; cj.roebuck@jmwaller.com; Hendel, Jeffrey <Hendel.Jeffrey@epa.gov>; Maycock, Marilyn <Maycock.Marilyn@epa.gov>
Subject: R4 LIMS Results: Project 13-0116, C130213 SVOA 02 04 13 1100

On Monday, February 4, 2013, results for the following were released by the Region 4 Laboratory:

Analyses:
Semi Volatile Organics (SVOA)

Project Number: 13-0116
Project Name: Smokey Mountain Smelters
City: Knoxville **County:** Knox **State:** TN

These results were reported by:
Jeffrey Hendel (E-mail: Hendel.Jeffrey@epa.gov)

If you have questions concerning the laboratory results, please feel free to contact the laboratory personnel shown above as having reported the data. We also encourage you to provide feedback to the Region 4 laboratory by filling out our online (*EPA internal network only*) [Customer Survey Form](#).

These results are for the following Sample Type(s):

Water (Equipment Rinse Blank)
Water (Groundwater)

PDF DATA RESULTS REPORT FILE ATTACHMENT:

An Adobe Acrobat PDF file is attached to this message that contains final results for the analyses as indicated in the data report.

DATA EXPORT FILE ATTACHMENT:

If attached, data export files will be tab delimited ASCII text files contained in a file that has been formatted using the ZIP archiving format (.Dat extension). Please consult your local computer support personnel if you have problems extracting these files. If you have questions about the data file formats and the information contained in these files, or if you would like to request export files for previously reported data, use the contact information shown below to contact the appropriate person with your concerns. To generate export files for previously reported data we'll need the name of the PDF report file that was attached to the original transmittal message.

For questions concerning this message and attachments, or any other LIMS or data reporting issues, please call the SESD PC Hotline at 706-355-8825 or send an email to r4lims@epa.gov.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 4 Science and Ecosystem Support Division
980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0116

Project: 13-0116, Smokey Mountain Smelters - Reported by Jeffrey Hendel

February 4, 2013

4SESD-MTSB

MEMORANDUM

SUBJECT: FINAL Analytical Report
Project: 13-0116, Smokey Mountain Smelters
Superfund Remedial

FROM: Jeffrey Hendel
Quality Assurance Section Chemist

THRU: Marilyn Maycock, Chief
Quality Assurance Section

TO: Rusty Kestle

Attached are the final results for the analytical groups listed below. These analyses were performed in accordance with the associated contract Statement Of Work (SOW). In general, project data quality objectives have not been used to evaluate these data prior to release by the Quality Assurance Section. For a listing of specific data qualifiers and explanations, please refer to the Data Qualifier Definitions included in this report.

Analyses Included in this report:

Method Used:

Semi Volatile Organics (SVOA)

Semivolatile organic compounds

CLP BNA (Water)



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D.A.R.T. Id: 13-0116

Project: 13-0116, Smokey Mountain Smelters - Reported by Jeffrey Hendel

Report Narrative for Work Order C130213, Project: 13-0116
Site Name: Smokey Mountain Smelters, Knoxville, TN
CLP Case No. 43195, ELEMENT Sample Nos. C130213-02-11, 13
C130214-02, 05-07 (PES only)

Organic Analysis: Chemtech Consulting Group, Inc., Mountainside, NJ

The ESAT Work Team reviewed data for eleven (11) water samples analyzed for Volatile Organic Compounds, Semi-Volatile Extractable Organic Compounds, Pesticide Compounds, and PCB Aroclors per CLP Statement of Work SOM01.2. The samples were collected between 12/11/12 and 12/13/12, and were received by the laboratory on 12/13/12 and 12/14/12. The final data package was received on 01/04/13 by the USEPA Quality Assurance Section, Region 4 SEDS/MTSB. The analytical results were reported in one sample delivery group (SDG) by the laboratory. In addition to the field samples, the laboratory also analyzed four performance evaluation samples (PES) for evaluating the laboratory's performance with using the methods.

The laboratory satisfied all technical analysis and extraction holding time requirements. A Stage 4 validation consisting of an electronic/manual review (S4VEM) was performed on the organic samples submitted for this case. The data package presents acceptable technical performance with qualifications.

All results associated with erratic initial and/or continuing calibration performance were "J" flagged with the appropriate Element qualifier (CLP16 and/or QC-1). Deuterated monitoring compounds (DMC) are used as surrogates in each sample for GC/MS analysis to monitor extraction efficiency.

Data quality factors requiring qualification of results are discussed below:

Volatile Organic Compounds

The laboratory encountered a poor instrument response for Acetone in the initial calibration performed for this Case. All acetone results were qualified "R" (CLP17).

The percent recoveries for DMCs were less than the lower quality control limit in samples C130213-11 and 13. All compounds associated with an out of control DMC were "J" qualified (QS-3).

Semi-Volatile Extractable Organic Compounds

The laboratory scored within warning limits for all spiked analytes in the PES except for Caprolactam, which was scored as action low, and Hexachlorocyclopentadiene, which was scored as warning high. All Caprolactam results were non-detects and qualified "R" (CLP27), and Hexachlorocyclopentadiene results did not require qualification since there were no positive detects.



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The percent recovery of the DMC 4-Chloroaniline-d4 was less than the lower quality control limit established in the method and less than 10% in samples C130213-02 and 13. The compounds associated with this out of control DMC; 4-Chloroaniline, Hexachlorocyclopentadiene, and 3, 3'-Dichlorobenzidine were qualified "R" (QS-4).

The percent recovery of the DMC 4-Chloroaniline-d4 was within the quality control limits established by the method and less than 10 in sample C130213-11. These compounds associated with this DMC; 4-Chloroaniline, Hexachlorocyclopentadiene, and 3, 3'-Dichlorobenzidine were qualified "J" (QS-4).

The percent recoveries of DMCs were less than the quality control limit in samples C130213-02, 11, and 13. All compounds associated with an out of control DMC were qualified "J" (QS-3).

Pesticide Compounds

There no anomalies associated with the pesticide analysis requiring additional qualification of data.

PCB Aroclors

There no anomalies associated with the PCB Aroclors analysis requiring additional qualification of data.

Data qualification factors are explained by the Region 4 - specific qualifier definitions which are included elsewhere in this report. Further details are provided in the complete data review report, which is on file in the Region 4 SESD Records Center.

cc: Nardina Turner



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SAMPLES INCLUDED IN THIS REPORT

Project: 13-0116, Smokey Mountain Smelters

Contract Lab Case: 43195

Sample ID	Laboratory ID	MD#	D#	Matrix	Date Collected
SMSRB121212	C130213-02	72F6	72F6	Equipment Rinse Blank	12/12/12 11:30
SMSMW10B	C130213-11	72G6	72G6	Groundwater	12/12/12 10:25
SMSMW910B	C130213-13	72G5	72G5	Groundwater	12/12/12 10:30



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DATA QUALIFIER DEFINITIONS

U	The analyte was not detected at or above the reporting limit.
CLP01	Concentration reported is less than the lowest standard on calibration curve
CLP16	Initial Calibration Response Erratic
CLP27	PE sample recovery scored as action low.
J	The identification of the analyte is acceptable; the reported value is an estimate.
OC-1	Analyte concentration low in continuing calibration verification standard
OS-3	Surrogate recovery is lower than established control limits.
OS-4	Surrogate recovery less than 10%
R	The presence or absence of the analyte can not be determined from the data due to severe quality control problems. The data are rejected and considered unusable.

ACRONYMS AND ABBREVIATIONS

CAS	Chemical Abstracts Service Note: Analytes with no known CAS identifiers have been assigned codes beginning with "E", the EPA ID as assigned by the EPA Substance Registry System (www.epa.gov/srs), or beginning with "R4-", a unique identifier assigned by the EPA Region 4 laboratory.
MDL	Method Detection Limit - The minimum concentration of a substance (an analyte) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero.
MRL	Minimum Reporting Limit - Analyte concentration that corresponds to the lowest demonstrated level of acceptable quantitation. The MRL is sample-specific and accounts for preparation weights and volumes, dilutions, and moisture content of soil/sediments.
TIC	Tentatively Identified Compound - An analyte identified based on a match with the instrument software's mass spectral library. A calibration standard has not been analyzed to confirm the compound's identification or the estimated concentration reported.



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Project: 13-0116, Smokey Mountain Smelters - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 13-0116, Smokey Mountain Smelters

Contract Lab Case: 43195

Sample ID: SMSRB121212

Lab ID: C130213-02

MD No: 72F6 CHEM

Station ID:

Matrix: Equipment Rinse Blank

D No: 72F6 CHEM

Date Collected: 12/12/12 11:30

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
1319-77-3	(3-and/or 4-)Methylphenol	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
92-52-4	1,1-Biphenyl	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
95-95-4	2,4,5-Trichlorophenol	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
88-06-2	2,4,6-Trichlorophenol	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
120-83-2	2,4-Dichlorophenol	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
105-67-9	2,4-Dimethylphenol	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
51-28-5	2,4-Dinitrophenol	10	U, J, QC-1, QS-3, CLP16	ug/L	10	12/14/12	12/24/12	CLP SOM01.2 B
121-14-2	2,4-Dinitrotoluene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
606-20-2	2,6-Dinitrotoluene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
91-58-7	2-Chloronaphthalene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
95-57-8	2-Chlorophenol	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
534-52-1	2-Methyl-4,6-dinitrophenol	10	U, J, CLP16	ug/L	10	12/14/12	12/24/12	CLP SOM01.2 B
91-57-6	2-Methylnaphthalene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
95-48-7	2-Methylphenol	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
88-74-4	2-Nitroaniline	10	U, J, QS-3	ug/L	10	12/14/12	12/24/12	CLP SOM01.2 B
88-75-5	2-Nitrophenol	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
91-94-1	3,3'-Dichlorobenzidine	5.0	U, R, QS-4	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
99-09-2	3-Nitroaniline	10	U, J, QS-3	ug/L	10	12/14/12	12/24/12	CLP SOM01.2 B
101-55-3	4-Bromophenyl phenyl ether	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
59-50-7	4-Chloro-3-methylphenol	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
106-47-8	4-Chloroaniline	5.0	U, R, QS-4, CLP16	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
7005-72-3	4-Chlorophenyl phenyl ether	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
100-01-6	4-Nitroaniline	10	U, J, QS-3	ug/L	10	12/14/12	12/24/12	CLP SOM01.2 B
100-02-7	4-Nitrophenol	10	U, J, QS-3	ug/L	10	12/14/12	12/24/12	CLP SOM01.2 B
83-32-9	Acenaphthene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B



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Project: 13-0116, Smokey Mountain Smelters - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 13-0116, Smokey Mountain Smelters

Contract Lab Case: 43195

Sample ID: SMSRB121212

Lab ID: C130213-02

MD No: 72F6 CHEM

Station ID:

Matrix: Equipment Rinse Blank

D No: 72F6 CHEM

Date Collected: 12/12/12 11:30

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
208-96-8	Acenaphthylene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
98-86-2	Acetophenone	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
120-12-7	Anthracene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
1912-24-9	Atrazine	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
100-52-7	Benzaldehyde	5.0	U, J, QS-3	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
56-55-3	Benzo(a)anthracene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
50-32-8	Benzo(a)pyrene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
205-99-2	Benzo(b)fluoranthene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
191-24-2	Benzo(g,h,i)perylene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
207-08-9	Benzo(k)fluoranthene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
85-68-7	Benzyl butyl phthalate	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
111-91-1	Bis(2-chloroethoxy)methane	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
111-44-4	bis(2-Chloroethyl) Ether	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
39638-32-9	Bis(2-chloroisopropyl) ether	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
117-81-7	Bis(2-ethylhexyl) phthalate	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
105-60-2	Caprolactam	5.0	U, R, CLP27	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
86-74-8	Carbazole	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
218-01-9	Chrysene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
53-70-3	Dibenzo(a,h)anthracene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
132-64-9	Dibenzofuran	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
84-66-2	Diethyl phthalate	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
131-11-3	Dimethyl phthalate	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
84-74-2	Di-n-butylphthalate	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
117-84-0	Di-n-octylphthalate	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
206-44-0	Fluoranthene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
86-73-7	Fluorene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
118-74-1	Hexachlorobenzene (HCB)	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
87-68-3	Hexachlorobutadiene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
77-47-4	Hexachlorocyclopentadiene (HCCP)	5.0	U, R, QS-4	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B



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D.A.R.T. Id: 13-0116

Project: 13-0116, Smokey Mountain Smelters - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 13-0116, Smokey Mountain Smelters

Contract Lab Case: 43195

Sample ID: SMSRB121212

Lab ID: C130213-02

MD No: 72F6 CHEM

Station ID:

Matrix: Equipment Rinse Blank

D No: 72F6 CHEM

Date Collected: 12/12/12 11:30

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
67-72-1	Hexachloroethane	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
193-39-5	Indeno (1,2,3-cd) pyrene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
78-59-1	Isophorone	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
91-20-3	Naphthalene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
98-95-3	Nitrobenzene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
621-64-7	n-Nitroso di-n-Propylamine	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
122-39-4	n-Nitrosodiphenylamine/Diphenylamine	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
87-86-5	Pentachlorophenol	10	U, J, CLP16	ug/L	10	12/14/12	12/24/12	CLP SOM01.2 B
85-01-8	Phenanthrene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
108-95-2	Phenol	5.0	U, J, QS-3	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
129-00-0	Pyrene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
Tentatively Identified Compounds:								
R4-0000	Tentatively Identified Compounds	5	U	ug/L	5	12/14/12	12/24/12	CLP SOM01.2 B



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Semi Volatile Organics

Project: 13-0116, Smokey Mountain Smelters

Contract Lab Case: 43195

Sample ID: SMSMW10B

Lab ID: C130213-11

MD No: 72G6 CHEM

Station ID: SMSMW10B

Matrix: Groundwater

D No: 72G6 CHEM

Date Collected: 12/12/12 10:25

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
1319-77-3	(3-and/or 4-)Methylphenol	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
92-52-4	1,1-Biphenyl	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
95-95-4	2,4,5-Trichlorophenol	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
88-06-2	2,4,6-Trichlorophenol	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
120-83-2	2,4-Dichlorophenol	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
105-67-9	2,4-Dimethylphenol	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
51-28-5	2,4-Dinitrophenol	10	U, J, QS-3, CLP16, QC-1	ug/L	10	12/14/12	12/24/12	CLP SOM01.2 B
121-14-2	2,4-Dinitrotoluene	7.5		ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
606-20-2	2,6-Dinitrotoluene	3.5	J, CLP01	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
91-58-7	2-Chloronaphthalene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
95-57-8	2-Chlorophenol	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
534-52-1	2-Methyl-4,6-dinitrophenol	10	U, J, CLP16	ug/L	10	12/14/12	12/24/12	CLP SOM01.2 B
91-57-6	2-Methylnaphthalene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
95-48-7	2-Methylphenol	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
88-74-4	2-Nitroaniline	10	U, J, QS-3	ug/L	10	12/14/12	12/24/12	CLP SOM01.2 B
88-75-5	2-Nitrophenol	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
91-94-1	3,3'-Dichlorobenzidine	5.0	U, J, QS-4	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
99-09-2	3-Nitroaniline	10	U, J, QS-3	ug/L	10	12/14/12	12/24/12	CLP SOM01.2 B
101-55-3	4-Bromophenyl phenyl ether	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
59-50-7	4-Chloro-3-methylphenol	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
106-47-8	4-Chloroaniline	5.0	U, J, QS-4, CLP16	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
7005-72-3	4-Chlorophenyl phenyl ether	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
100-01-6	4-Nitroaniline	10	U, J, QS-3	ug/L	10	12/14/12	12/24/12	CLP SOM01.2 B
100-02-7	4-Nitrophenol	10	U, J, QS-3	ug/L	10	12/14/12	12/24/12	CLP SOM01.2 B
83-32-9	Acenaphthene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 4 Science and Ecosystem Support Division
980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0116

Project: 13-0116, Smokey Mountain Smelters - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 13-0116, Smokey Mountain Smelters

Contract Lab Case: 43195

Sample ID: SMSMW10B

Lab ID: C130213-11

MD No: 72G6 CHEM

Station ID: SMSMW10B

Matrix: Groundwater

D No: 72G6 CHEM

Date Collected: 12/12/12 10:25

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
208-96-8	Acenaphthylene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
98-86-2	Acetophenone	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
120-12-7	Anthracene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
1912-24-9	Atrazine	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
100-52-7	Benzaldehyde	5.0	U, J, QS-3	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
56-55-3	Benzo(a)anthracene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
50-32-8	Benzo(a)pyrene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
205-99-2	Benzo(b)fluoranthene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
191-24-2	Benzo(g,h,i)perylene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
207-08-9	Benzo(k)fluoranthene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
85-68-7	Benzyl butyl phthalate	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
111-91-1	Bis(2-chloroethoxy)methane	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
111-44-4	bis(2-Chloroethyl) Ether	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
39638-32-9	Bis(2-chloroisopropyl) ether	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
117-81-7	Bis(2-ethylhexyl) phthalate	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
105-60-2	Caprolactam	5.0	U, R, CLP27	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
86-74-8	Carbazole	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
218-01-9	Chrysene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
53-70-3	Dibenzo(a,h)anthracene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
132-64-9	Dibenzofuran	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
84-66-2	Diethyl phthalate	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
131-11-3	Dimethyl phthalate	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
84-74-2	Di-n-butylphthalate	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
117-84-0	Di-n-octylphthalate	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
206-44-0	Fluoranthene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
86-73-7	Fluorene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
118-74-1	Hexachlorobenzene (HCB)	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
87-68-3	Hexachlorobutadiene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
77-47-4	Hexachlorocyclopentadiene (HCCP)	5.0	U, J, QS-4	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B



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D.A.R.T. Id: 13-0116

Project: 13-0116, Smokey Mountain Smelters - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 13-0116, Smokey Mountain Smelters

Contract Lab Case: 43195

Sample ID: SMSMW10B

Lab ID: C130213-11

MD No: 72G6 CHEM

Station ID: SMSMW10B

Matrix: Groundwater

D No: 72G6 CHEM

Date Collected: 12/12/12 10:25

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
67-72-1	Hexachloroethane	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
193-39-5	Indeno (1,2,3-cd) pyrene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
78-59-1	Isophorone	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
91-20-3	Naphthalene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
98-95-3	Nitrobenzene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
621-64-7	n-Nitroso di-n-Propylamine	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
122-39-4	n-Nitrosodiphenylamine/Diphenylamine	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
87-86-5	Pentachlorophenol	10	U, J, CLP16	ug/L	10	12/14/12	12/24/12	CLP SOM01.2 B
85-01-8	Phenanthrene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
108-95-2	Phenol	5.0	U, J, QS-3	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
129-00-0	Pyrene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
Tentatively Identified Compounds:								
R4-0000	Tentatively Identified Compounds	5	U	ug/L	5	12/14/12	12/24/12	CLP SOM01.2 B



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D.A.R.T. Id: 13-0116

Project: 13-0116, Smokey Mountain Smelters - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 13-0116, Smokey Mountain Smelters

Contract Lab Case: 43195

Sample ID: SMSMW910B

Lab ID: C130213-13

MD No: 72G5 CHEM

Station ID: SMSMW10B

Matrix: Groundwater

D No: 72G5 CHEM

Date Collected: 12/12/12 10:30

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
1319-77-3	(3-and/or 4-)Methylphenol	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
92-52-4	1,1-Biphenyl	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
95-95-4	2,4,5-Trichlorophenol	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
88-06-2	2,4,6-Trichlorophenol	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
120-83-2	2,4-Dichlorophenol	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
105-67-9	2,4-Dimethylphenol	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
51-28-5	2,4-Dinitrophenol	10	U, J, QS-3, QC-1, CLP16	ug/L	10	12/14/12	12/24/12	CLP SOM01.2 B
121-14-2	2,4-Dinitrotoluene	10		ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
606-20-2	2,6-Dinitrotoluene	5.3		ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
91-58-7	2-Chloronaphthalene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
95-57-8	2-Chlorophenol	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
534-52-1	2-Methyl-4,6-dinitrophenol	10	U, J, CLP16	ug/L	10	12/14/12	12/24/12	CLP SOM01.2 B
91-57-6	2-Methylnaphthalene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
95-48-7	2-Methylphenol	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
88-74-4	2-Nitroaniline	10	U, J, QS-3	ug/L	10	12/14/12	12/24/12	CLP SOM01.2 B
88-75-5	2-Nitrophenol	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
91-94-1	3,3'-Dichlorobenzidine	5.0	U, R, QS-4	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
99-09-2	3-Nitroaniline	10	U, J, QS-3	ug/L	10	12/14/12	12/24/12	CLP SOM01.2 B
101-55-3	4-Bromophenyl phenyl ether	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
59-50-7	4-Chloro-3-methylphenol	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
106-47-8	4-Chloroaniline	5.0	U, R, QS-4, CLP16	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
7005-72-3	4-Chlorophenyl phenyl ether	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
100-01-6	4-Nitroaniline	10	U, J, QS-3	ug/L	10	12/14/12	12/24/12	CLP SOM01.2 B
100-02-7	4-Nitrophenol	10	U, J, QS-3	ug/L	10	12/14/12	12/24/12	CLP SOM01.2 B
83-32-9	Acenaphthene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B



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D.A.R.T. Id: 13-0116

Project: 13-0116, Smokey Mountain Smelters - Reported by Jeffrey Hendel

Semi Volatile Organics

Project: 13-0116, Smokey Mountain Smelters

Contract Lab Case: 43195

Sample ID: SMSMW910B

Lab ID: C130213-13

MD No: 72G5 CHEM

Station ID: SMSMW10B

Matrix: Groundwater

D No: 72G5 CHEM

Date Collected: 12/12/12 10:30

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
208-96-8	Acenaphthylene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
98-86-2	Acetophenone	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
120-12-7	Anthracene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
1912-24-9	Atrazine	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
100-52-7	Benzaldehyde	5.0	U, J, QS-3	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
56-55-3	Benzo(a)anthracene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
50-32-8	Benzo(a)pyrene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
205-99-2	Benzo(b)fluoranthene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
191-24-2	Benzo(g,h,i)perylene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
207-08-9	Benzo(k)fluoranthene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
85-68-7	Benzyl butyl phthalate	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
111-91-1	Bis(2-chloroethoxy)methane	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
111-44-4	bis(2-Chloroethyl) Ether	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
39638-32-9	Bis(2-chloroisopropyl) ether	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
117-81-7	Bis(2-ethylhexyl) phthalate	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
105-60-2	Caprolactam	5.0	U, R, CLP27	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
86-74-8	Carbazole	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
218-01-9	Chrysene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
53-70-3	Dibenzo(a,h)anthracene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
132-64-9	Dibenzofuran	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
84-66-2	Diethyl phthalate	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
131-11-3	Dimethyl phthalate	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
84-74-2	Di-n-butylphthalate	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
117-84-0	Di-n-octylphthalate	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
206-44-0	Fluoranthene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
86-73-7	Fluorene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
118-74-1	Hexachlorobenzene (HCB)	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
87-68-3	Hexachlorobutadiene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
77-47-4	Hexachlorocyclopentadiene (HCCP)	5.0	U, R, QS-4	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B



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D.A.R.T. Id: 13-0116

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Semi Volatile Organics

Project: 13-0116, Smokey Mountain Smelters

Contract Lab Case: 43195

Sample ID: SMSMW910B

Lab ID: C130213-13

MD No: 72G5 CHEM

Station ID: SMSMW10B

Matrix: Groundwater

D No: 72G5 CHEM

Date Collected: 12/12/12 10:30

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
67-72-1	Hexachloroethane	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
193-39-5	Indeno (1,2,3-cd) pyrene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
78-59-1	Isophorone	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
91-20-3	Naphthalene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
98-95-3	Nitrobenzene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
621-64-7	n-Nitroso di-n-Propylamine	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
122-39-4	n-Nitrosodiphenylamine/Diphenylamine	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
87-86-5	Pentachlorophenol	10	U, J, CLP16	ug/L	10	12/14/12	12/24/12	CLP SOM01.2 B
85-01-8	Phenanthrene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
108-95-2	Phenol	5.0	U, J, QS-3	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
129-00-0	Pyrene	5.0	U	ug/L	5.0	12/14/12	12/24/12	CLP SOM01.2 B
Tentatively Identified Compounds:								
R4-0000	Tentatively Identified Compounds	5	U	ug/L	5	12/14/12	12/24/12	CLP SOM01.2 B